STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Union Electric Company (AmerenUE) :

:

Petition for Approval of : 02-0565

Decommissioning Riders, Cost : Estimate and Funding Level of Nuclear : Decommissioning Trust Fund. :

ORDER

By the Commission:

I. PROCEDURAL HISTORY

On September 3, 2002, Union Electric Company, d/b/a AmerenUE ("UE") filed a verified petition pursuant to Sections 9-201, 9-201.5, and 16-114 of the Public Utilities Act ("Act"), 220 ILCS 5/1-101 et seq., requesting that the Illinois Commerce Commission ("Commission") approve: (1) the cost estimate for decommissioning UE's Callaway Plant; (2) two revised decommissioning Riders, one of which will be applicable to bundled customers, and one of which will be applicable to delivery service customers (the two Riders are in all other respects identical); and (3) the assumptions set forth in the direct testimony of Kevin Redhage at pages 27-28 to justify the annual funding level of UE's nuclear decommissioning trust fund. UE also requests that the Commission's order specify that the \$505,439 annual funding level of its decommissioning trust fund is included in UE's current cost of service for rate-making purposes. Along with the petition, UE filed the direct testimony of James Pozzo, Neal Slaten, and Kevin Redhage.

Pursuant to due notice, status hearings were held in this matter before a duly authorized Administrative Law Judge at the Commission's offices in Springfield, Illinois on October 24, November 12, and December 20, 2002. An evidentiary hearing was held on March 18, 2003. Counsel for UE and Commission Staff ("Staff") entered appearances at the hearings. No petitions to intervene were received. In addition to the testimony submitted along with the petition on behalf of UE, Ronald Linkenback, Leslie Pugh, Rochelle Phipps, and Mike Luth testified on behalf of Staff. At the end of the evidentiary hearing, the record was marked "Heard and Taken." No briefs were submitted in this matter.

II. PARTIES' POSITIONS

UE requested that the Commission approve an annual decommissioning expense and contribution to the Callaway Plant Tax Qualified Nuclear Decommissioning Trust Fund ("Trust Fund") in the amount of \$505,439. UE witness Redhage asks that the Commission state in its order that the foregoing decommissioning costs are included

in UE's cost of service for ratemaking purposes and to approve the assumptions set forth in Schedule 2 of his direct testimony used for calculating the annual contribution amount. In addition, Mr. Redhage seeks approval of his estimate of the pre-tax and expense nominal returns on the Trust Fund's investments to be 9.900% through 2022 and 7.5% thereafter, which equates to an average pre-tax and expense nominal return over the life of the fund of 9.3564%.

UE witness Slaten provides the decommissioning cost study estimates used as the basis for calculating the annual contribution to the Trust Fund. As explained by Mr. Slaten, Nuclear Regulatory Commission ("NRC") regulations require UE to perform a generic decommissioning cost estimate each year based on the NRC's "generic" methodology (10 CFR 50.75) to determine the minimum amounts upon which financial assurance for decommissioning must be based. Mr. Slaten provides the cost estimate based on the NRC's generic methodology in Schedule 1 to his direct testimony. He also testifies that the NRC regulations allow UE to perform a more detailed site specific decommissioning cost study for estimating the decommissioning costs. advantage of this opportunity and hired TLG Services to conduct the site specific decommissioning cost study set forth in Schedule 2 of Mr. Slaten's direct testimony. Mr. Slaten indicates that the higher of the generic and site specific cost estimates is used as a basis for the decommissioning funding plan. In this case, according to Mr. Slaten, the site specific cost study estimated that it would cost \$515,339,000 (in 2002 dollars) to decommission the Callaway Plant while the NRC generic cost study estimated that the cost to decommission the Callaway Plant would range from \$321,540,000 to \$554,318,000 (in 2002 dollars) depending on the assumptions used for radioactive waste disposal practices. Since the site specific cost estimate is higher than the most recent generic estimate minimum, Mr. Slaten states that the site specific estimate was used for UE's decommissioning fund planning.

Mr. Pozzo discusses the total amount of nuclear decommissioning funds collected under UE's Rider DEF versus the amount authorized by the Commission in Docket No. 99-0186 to be collected during the period of October 1999 through June 2002. Mr. Pozzo testifies that the total amount of nuclear decommissioning funds collected during the subject period was \$789,632 while the authorized amount was \$815,584. This, according to Mr. Pozzo, resulted in a collection deficiency of \$25,952. After annualizing this deficiency amount, Mr. Pozzo adds it to the annual decommissioning funding level proposed by Mr. Redhage to come up with the new annual decommissioning funding collection level of \$514,090. Mr. Pozzo further states that he then converted the annual decommissioning funding collection level to a kilowatt-hour charge by using a forecast of total retail electric sales for 2003. By doing this, he concludes that the new decommissioning expense factor to be included in Rider DEF should be 0.015¢ per kilowatt-hour. Mr. Pozzo also testifies that UE is proposing to change the language of its Rider DEF tariff sheets to include the words "collection" levels" in the last sentence on each of the tariff sheets. This change, he explains, would clarify that the collection levels would be adjusted in accordance with the Rider and not the approved decommissioning expense and contribution amounts.

In response to UE, Staff witness Linkenback testifies that he reviewed the site specific cost estimate for decommissioning the Callaway Plant set forth in Schedule 2 of Mr. Slaten's direct testimony and the inflation rate used to escalate these costs into the future. As a result of his review, Mr. Linkenback indicates that for the most part, the site specific decommissioning cost estimate provided by UE is reasonable except that UE had not provided sufficient evidence to justify including site restoration costs as a legitimate decommissioning expense. In the absence of additional supporting information for including site restoration costs, Mr. Linkenback recommended that they be excluded from the decommissioning expense estimate thereby reducing the decommissioning expense by \$51.245 million. Mr. Linkenback also states that he does not agree with the methodology Mr. Redhage uses to calculate the decommissioning inflation rate of 4% but agreed that 4% was nevertheless a reasonable estimate.

Ms. Pugh testifies that in addition to reviewing the site specific decommissioning cost estimate, she was also responsible for reviewing the current after-tax value of UE's Illinois jurisdictional sub-account of the Trust Fund including the composite federal and state income tax rate used to determine this amount. Ms. Pugh states that she agrees that the after tax-value amount contained in the Illinois jurisdiction sub-account as of June 30, 2002 was \$12,403,871.18 as provided by Mr. Redhage and the composite federal and state income tax rate should be 24.5283%, which is also consistent with Mr. Redhage. Ms. Pugh, however, asserts that UE's request to include property taxes as a decommissioning expense is not appropriate and as a result the decommissioning cost estimate should be reduced by \$2,553,000.

Ms. Phipps testifies that she reviewed the rate of return assumptions for UE's proposed annual decommissioning trust funding level. As a result of this review, Ms. Phipps determined that UE's proposed real bond yield of 4.5% during the years 2003-2011 was not reasonable, and by using the following calculation methodology, a 5% real bond yield should be used instead. To estimate a real long-term bond yield during the 2003-2011 measurement period, Ms. Phipps averaged forecasted real Aaa-rated bond yields and real U.S. Treasury bond yields. To estimate a real short-term bond yield during the 2003-2011 measurement period, she averaged the forecasted annual real federal funds rates. Using those proxies for long-term and short-term bond yields, Ms. Phipps calculated blended real yields using two sets of weights: (a) 90% long-term and 10% short-term securities, which resulted in a 5.07% real yield; and (b) 80% longterm and 20% short-term securities, which resulted in a 4.93% real yield. Accordingly, she recommends using a 5.0% real bond yield for this proceeding, which represents an average of the two blended real bond yield estimates. Ms. Phipps states further that the 8.0% nominal bond yield that results from the sum of a 5.0% real bond yield and 3.0% inflation rate coincides with published forecasts and adding a 4.0% equity premium to an 8.0% nominal bond yields would result in a 12.0% nominal return on equity. Other than this, she reports no objection to any of UE's other finance related assumptions contained in Mr. Redhage's testimony.

Staff witness Luth testifies that UE's 7.21% allocation factor used to assess the Illinois jurisdiction with its proportionate share of the decommissioning expense was

incorrect since it improperly accounted for the impact interruptible customers have on the allocation factor. After adjusting for interruptible customers, and by using the coincident peak readings for the months of October 2001 through September 2002, Mr. Luth asserts that the allocation factor should be 6.81%. He also recommends that UE change the wording contained in each of its Rider DEFs by replacing the phrase "...the following January 1..." with the phrase "after Commission approval." According to Mr. Luth, this would make certain that the Rider DEF rate would not change, but remain in effect until the Commission issues an order authorizing its change, even if such order came after January 1.

In response to Staff's recommending the removal of site restoration costs as a legitimate decommissioning expense, Mr. Slaten provided additional support for UE's position. He noted that the definitions of "Decommissioning" and "Decommissioning" costs" contained in Section 8-508.1(a), (1) and (2) of the Act clearly include costs for removal and disposal of structures, systems, components, and the site itself. Mr. Slaten further averred that leaving some remaining structures in place, abandoned, and subject to further aging and decay clearly poses a threat to public safety, which the process of decommissioning is to prevent. He also testified that any remaining structures post decommissioning would have minimal value for use in a next generation power plant, would be costly to renovate, refurbish or convert, and will need to be maintained until needed. Moreover, he continued, the compartmentalized design of the Callaway Plant would complicate the installation of new power components, electrical, and HVAC systems. Additionally, the Callaway Plant's physical location is distant from the UE's load center, is five miles away from the nearest water source making pumping costs expensive, and has no rail or barge access for coal deliveries. These factors, according to Mr. Slaten, have led UE to conclude that they will not reuse any of the buildings on the site for future purposes. Furthermore, with demolition contractors already mobilized on site for the removal of the primary structures, he contends that prompt dismantling of the secondary structures is the most appropriate and cost effective option.

Mr. Slaten also responded to Ms. Pugh's recommendation that property taxes be excluded as a decommissioning expense. Mr. Slaten states that the definition of "Decommissioning costs" in the Act does not exclude recovery of property taxes as a decommissioning expense and in fact includes all reasonable costs and expense incurred in connection with decommissioning. He claims that property taxes are typically included in the cost estimate for decommissioning since they are no different than other housekeeping or collateral expenses that will be incurred throughout the decommissioning process, such as insurance and fees. Furthermore, once the plant ceases to operate, the plant will no longer be a "used and useful" asset. According to Mr. Slaten, property taxes associated with a non-used and useful plant would not be allowed in base rates.

Mr. Redhage responded to the positions of Mr. Linkenback, Ms. Phipps, and Mr. Luth. With regard to Mr. Luth's testimony regarding the allocation factor, UE agrees that it inadvertently included interruptible customer load in the derivation of the factor. Consequently, Mr. Redhage agrees that a 6.81% allocation factor should be used to

determine the proportion of decommissioning expense that should be allocated to the Illinois jurisdiction. Mr. Redhage, however, argues that the October 2001 through September 2002 timeframe used by Mr. Luth in his calculation of the allocation factor is infeasible. Mr. Redhage indicates that UE, in accordance with the Order issued in Docket No. 99-0186, is required to file its Rider DEF petition with the Commission by September 1, every three years. Mr. Redhage explains that UE can not comply with the prior Order and follow Mr. Luth's recommendation because it would not have access to the data that Mr. Luth recommends using. Therefore, Mr. Redhage states that UE would make use of, in its Rider DEF filing, the best data available.

Mr. Redhage also refuted Mr. Linkenback's disagreement with UE's computation methodology of the decommissioning inflation rate. In doing so, he identifies what he believes to be deficiencies in Mr. Linkenback's approach to the calculation. First, according to Mr. Redhage, Mr. Linkenback inadvertently omitted a number of labor manhours contained in the site specific study that should have been included in his calculation. Second, Mr. Redhage asserts that the site specific decommissioning cost estimate provided by UE includes an average "contingency" of 19.1%, which he does not believe Mr. Linkenback factored into his calculation. Finally, Mr. Redhage finds Mr. Linkenback's use of a \$50 per manhour labor rate unsupported and too low. If all these modifications are factored into the approach Mr. Linkenback supported in his direct testimony, the result is much closer to the value proposed by UE. Moreover, Mr. Redhage testified that he does not agree with Mr. Linkenback's calculation of the historical compound annual growth rate of the decommissioning cost estimate nor the use of actual historical site specific cost estimates to develop a trend to use in projecting future decommissioning inflation values. As a result, Mr. Redhage asserted that UE's use of the NRC generic formula with projected expense components, where possible, is a superior methodology.

As for Ms. Phipps' assertion that a 5% real rate of return for bonds is more appropriate than UE's proposed 4.5%, Mr. Redhage testified that while he could not quarrel with the calculations performed by Ms. Phipps, he did not believe her methodology was any more accurate than UE's methodology in projecting the real rate of return on bonds.

Mr. Linkenback responded to Mr. Slaten's rebuttal testimony regarding site restoration costs by noting that the Commission can not be certain whether any of the buildings at the Callaway Plant will or could be used after decommissioning. Moreover, he continued, this uncertainty will remain until the anticipated closure of the plant in 2024 gets closer. In light of UE's testimony, however, Mr. Linkenback now concludes that it appears unlikely that the remaining buildings at the Callaway Plant will have any useful purpose once decommissioning is completed. As a result, he finds that UE has provided sufficient evidence to support including such costs as a decommissioning expense. He states further that UE and the Commission will have an opportunity every three years to re-examine the issue of site restoration.

Mr. Linkenback also responded to Mr. Redhage's comments regarding the decommissioning inflation rate. Mr. Linkenback testifies that the use of the site specific decommissioning study factors for calculating the decommissioning inflation rate rather than the NRC generic factors used by UE would result in a more defensible and accurate result. He does not suggest, however, that any changes to the 4% factor proposed by UE be made in this case. Mr. Linkenback merely suggests that UE reconsider the method it uses to calculate the factor in future Rider DEF filings.

In response to Mr. Redhage's testimony regarding the real return on bonds, Ms. Phipps continued to assert that her methodology for calculating the 5% real return on bonds assumption is more justifiable. Ms. Phipps argues that Staff's real bond yield was estimated using three different asset allocations, each of which results in a real bond yield that closely approximates 5% whereas UE's 4.5% real bond yield was based in part on unsubstantiated judgment and did not consider the Trust Fund's current fixed income asset allocation of short and long-term securities. She explains that to produce the 4.5% real rate of return on bonds proposed by Mr. Redhage, the fixed income asset allocation of the Trust Fund would have to be comprised of approximately 50% long-term and 50% short-term assets, which is unlikely given the current 90% long-term and 10% short-term allocation of the fixed income assets in the Trust Fund.

Ms. Pugh provided a response to Mr. Slaten's testimony regarding the inclusion of property tax as a decommissioning expense. She argues that just because the definition of decommissioning costs does not exclude property taxes does not imply that property taxes should be included. Moreover, according to Ms. Pugh, UE does not plan to dispose of the land immediately after the nuclear power plant ceases to operate. Instead, she notes, UE plans to continue to own property at the plant with certain parts of the facility operational and therefore used and useful. This, she claims, means that property tax on the plant will be continuing costs not related to decommissioning of the plant and should therefore not be included in the decommissioning cost estimate. Such continuing costs, she asserts, would remain in UE's base rates. Ms. Pugh testifies further that the 10% contingency factor contained in UE's estimated property tax expense was unsubstantiated and therefore inappropriate. She adds, however, that in future Rider DEF filings, UE would not be prohibited from requesting recovery of property taxes if it could demonstrate that such recovery would not result in double recovery of the property tax expense.

Mr. Luth responded to Mr. Redhage's partial acceptance of his recommended change in the allocation factor percentage used to allocate the decommissioning costs to the Illinois jurisdiction. Mr. Luth observes that Mr. Redhage did not accept the October 2001 through September 2002 measuring period for determining the allocation factor. Instead, he notes, UE intends to use a twelve month period ending June 30 for its Rider DEF filing. He adds, however, that use of UE's proposed period would not impact the results in this docket. Mr. Luth goes on to say that in future Rider DEF dockets, the Commission should not be limited by the results in this docket to an allocation to Illinois based upon a measurement period ending in June of the filing year. As in this docket, since future Rider DEF filings will be forward-looking, Mr. Luth asserts

that the Illinois allocation should be based on the most recent information possible, such as a 12 month period ending in September. A measurement period ending in September, according to Mr. Luth, would include the effects of the most recent summer, thereby including the most recent peak period of demand.

Rather than litigate the remaining differences between its and Staff's position, for settlement purposes and without waiving any rights in future Rider DEF proceedings, UE represented at the evidentiary hearing that it would agree to: (1) Staff's position with regard to removal of property tax from the decommissioning expense; (2) use Staff's 5% real return on bonds in the calculation of the annual funding level of the Trust Fund; and (3) use the most recent data possible in future Rider DEF filings for calculating the Illinois jurisdiction allocation factor. Applying these terms to the calculation of UE's annual decommissioning funding level yields an annual funding level of \$272,554. The annual decommissioning funding level plus the annualized collection deficit of \$25,952, as described by Mr. Pozzo, results in UE's Rider DEF being 0.008¢ per kilowatt-hour.

III. FINDINGS AND ORDERING PARAGRAPHS

The Commission, having considered the entire record, is of the opinion and finds that:

- (1) UE is a Missouri corporation providing electric and natural gas service to the public in Illinois as a public utility within the meaning of the Act;
- (2) the Commission has jurisdiction over UE and the subject matter hereof;
- (3) the recitals of fact and conclusions reached in the prefatory portion of this Order are supported by the evidence of record and are hereby adopted as findings of fact;
- (4) the \$512,786,000 estimated cost to decommission the Callaway Plant is just and reasonable;
- (5) the \$272,554 annual funding level of its decommissioning trust fund is included in UE's cost of service for Rider DEF rate-making purposes;
- (6) the annual decommissioning funding level of \$272,554 plus the \$25,952 collection deficit from the prior three-year period for which the annualized amount is \$8,651, totals to the \$282,205 to be collected through the Riders annually;
- (7) the estimated kilowatt-hour sales of 3,535,700,000 are appropriate;
- (8) the nuclear decommissioning factor of \$.008 was determined by dividing the total amount to be collected through the Riders of \$282,205 by the estimated kilowatt-hour sales of 3,535,700,000;

- (9) UE should file its next petition for approval to update the decommissioning riders, cost estimate and funding level of the nuclear decommissioning trust fund on or before September 1, 2005; and
- (10) UE should be directed to file, within five days of the entry of this Order and in the form set forth in Appendix A hereto, revised tariff sheets reflecting the language changes proposed by UE and Staff and reflecting the new Rider DEF amount of 0.008¢ per kilowatt-hour.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that Union Electric Company d/b/a AmerenUE is hereby authorized and directed to file new decommissioning riders and related tariffs in accordance with the prefatory portion of this Order within five days of the entry of this Order and in the form of Appendix A hereto.

IT IS FURTHER ORDERED that Union Electric Company d/b/a AmerenUE shall file its next petition for approval to update the decommissioning riders, cost estimate and funding level of the nuclear decommissioning trust fund on or before September 1, 2005.

IT IS FURTHER ORDERED that subject to the provisions of Section 10-113 of the Public Utilities Act and 83 III. Adm. Code Section 200.880, this Order is not final and is not subject to the Administrative Review Law.

By order of the Commission this 7th day of May, 2003.

(SIGNED) EDWARD C. HURLEY

Chairman